

METHOD OF AND APPARATUS FOR TESTING A FIRST MATERIAL  
FOR POTENTIAL PRESENCE OF SECOND MATERIALS

ABSTRACT

1 A method of detecting impurities in a mass, such  
2 as detecting metallic and/or plastic particles in a  
3 stream of tobacco particles or filter material for to-  
4 bacco smoke, includes the steps of moving the mass  
5 relative to a microwave field and/or vice versa, and  
6 analyzing the influence of the mass upon the microwave  
7 field. The analyzing step involves simultaneously measur-  
8 the actual values of a first and a second parameter of  
9 the microwave field, ascertaining the presence or absence  
10 of those changes of the parameters which are attributable  
11 to the presence of impurities in the mass, determining  
12 whether or not the changes are within an acceptable  
13 range, and generating signals for segregation of impurities-  
14 containing portions of the mass from the other portions  
15 when the changes are outside of the acceptable range.